

### **REMARKS**

Reconsideration of the application is respectfully requested.

Claims 1-12 are pending and at issue. Claims 1 and 5 are amended solely for clarification to correct minor informalities. No new matter is added to the application.

Claim 5 has been objected to for allegedly failing to further limit claim 1. Claim 5 has been amended as suggested by the Examiner. The basis for the objection is believed to have been addressed and overcome. Therefore, Applicants request that it be withdrawn.

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. According to the Examiner, the step “filtering oxide nanoparticles” lacks antecedent basis. Claim 1 has been amended to recite “filtering the oxide nanoparticles,” i.e., the oxide nanoparticles referred to in the preamble of the claim. Applicants submit that claim 1 is definite and request that the rejection be withdrawn.

Claims 1-12 have been rejected under 35 U.S.C. § 103(a) as being obvious over Mukherjee et al. (U.S. Patent No. 6,783,963; “Mukherjee”) in view of Lauf et al. (U.S. Patent No. 6,444,453; “Lauf”) and Li et al. (U.S. Patent No. 5,527,466; “Li”). According to the Examiner, Mukherjee teaches the synthesis of sulfide nanoparticles comprising incubating a wet fungus with a metal salt solution. The Examiner concedes that Mukherjee does not relate to oxide nanoparticles (the subject of the present invention) but contends that their synthesis would have been obvious based on the Lauf’s teaching of bacteria-mediated preparation of oxide nanoparticles and Li’s teaching of oxide particle filtration.

Mukherjee’s earliest publication was as U.S. Published Patent Application 2003/0186404 on October 2, 2003, which is less than one year prior to the filing of the present application on March 26, 2004. Standing alone, therefore, Mukherjee is prior art to the present application, if at all, under the provisions of 35 U.S.C. § 102(a).

However, upon information and belief, Applicants submit that conception of the present invention occurred prior to October 2, 2003, the earliest date of publication of Murkherjee. Submitted herewith as Exhibit A is a draft application for a corresponding Indian filing dated for June 2002, which subsequently was never filed. Applicants believe that a declaration of the inventors attesting to conception of the present invention prior to October 2, 2003 would be sufficient to remove Murkherjee as a reference under § 102(a).

Moreover, upon information and belief, Murkherjee and the present application were, at the time the invention was made, owned by or subject to an obligation of assignment to the same organization, i.e., the Council of Scientific & Industrial Research. Therefore, Murkherjee cannot form the basis of an obviousness rejection. 35 U.S.C. § 103(c).

The Applicants' representative is still in the process of obtaining the information necessary to prepare a declaration. Applicants are associated with a branch of the Government of India, and the correspondent of the undersigned is also located in India. Applicants' attorney believes that the reference can be overcome.

In the absence of Murkherjee, the teachings of Lauf and Li alone do not teach each limitation of the claimed invention and are insufficient to support a rejection for obviousness. Accordingly, withdrawal of the present rejection is respectfully requested.

Furthermore, the teaching of Murkherjee is limited to the synthesis of sulfide nanoparticles, and Lauf's teaching, which relates solely to a bacteria-mediated process, does not suggest to one of ordinary skill in the art a fungal-mediated synthesis of oxide nanoparticle with a reasonable expectation of success. The capability of any microorganism to form nanoparticles is not well-understood. Within the same genera, different species show different levels of activity. Thus, the teachings of Lauf and Li do not motivate one of ordinary skill in the art to prepare oxide nanoparticles utilizing a wet fungus or fungal extract, let alone the fungus of the present invention.

